

State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3503 FAX (603) 271-2982



July 19, 2002

Victor S. Krea, P.E. Wright-Pierce Engineers 99 Main Street Topsham, ME 04086-1204

Re: Administrative Order No. WD 02-01

Jaffrey WWTF Upgrade

Dear Vic:

The Department of Environmental Services (DES) received and reviewed your July 3, 2002 letter relative to the above subject and offers the following comments.

DES is willing to meet with you and the Town of Jaffrey regarding the current status of the treatment plant upgrade work. DES believes, however, that this meeting will be much more productive if we have had an opportunity to review the hydrogeologic report prior to this meeting. Until this information is received and reviewed, a meeting would be premature to discuss how the Town should address its future wastewater needs. In a previous conversation, you indicated that we would receive this report by July 10, 2002. In a subsequent e-mail, you indicated that the report would be submitted to DES by July 19, 2002 "at the earliest". I must reiterate the importance of DES receiving this report as soon as possible to satisfy the June 3, 2002 Administrative Order (Order) deadline for submittal of the hydrogeologic report as the previous hydrogeologic report submitted was incomplete.

Relative to proceeding with Phase I, the Town of Jaffrey is under an Order for upgrading the treatment plant. This Order requires the Town to award the Phase I contract by August 11, 2002. Therefore, Jaffrey must proceed with meeting the Phase I upgrade deadlines. Additionally, DES believes the Phase I upgrade should be completed for the following reasons.

- 1. Jaffrey's aeration system is literally falling apart. The yard air piping is leaking and blowing geysers of air/sand. The piping within the lagoons is coming apart and some of the air is bubbling out in boils rather than being diffused in the proper pattern.
- 2. The lagoons have been operating for about 15 years now and the accumulated sludge needs to be removed for operational reasons. The increasing ammonia concentrations in the effluent are likely due, at least in part, to the sludge aging process.

http://www.state.nh.us TDD Access: Relay NH 1-800-735-2964

- 3. By tying the sludge removal into an aeration upgrade under the Administrative Order, DES can help Jaffrey with a grant. Otherwise, the sludge removal is considered to be an O&M cost that Jaffrey has to bear on its own.
- 4. The treatment plant performance has been generally deteriorating over the past few years. While the treatment plant still generally performs within secondary standards of 30/30 for BOD and TSS, the effluent quality is declining over time and is not meeting the current NPDES permit limits. DES' opinion is that this Phase I interim upgrade is necessary to protect effluent quality while the Phase II solution is being developed and implemented.
- 5. The Jaffrey lagoons have a volume of approximately 35 million gallons. This capacity can offer a tremendous ability for flow equalization or storage. Jaffrey's domestic wastewater flow is on the order of 0.3 MGD, the average annual flow is about 0.5 MGD and the design capacity is 1.25 MGD. Infiltration and inflow (I/I) is a real issue for Jaffrey and the storage/ flow equalization capacity of the lagoons will help mitigate the impact of the I/I. Accordingly, most of the work of the Phase I upgrade will likely be useful in the final solution as well as improving performance during the interim period.

Once DES receives and reviews the hydrogeologic report, we will schedule a meeting with you and Jaffrey to further discuss the Phase II upgrade for the treatment plant and the alternative scenarios that you presented in your letter. In the meantime, DES expects Jaffrey to proceed with the Phase I upgrade in accordance with the Administrative Order schedule.

Sincerely,

Sharon L. Ducharme, P.E.

Supervisor, Compliance Section, WWEB

CC: J. Esposito ("Jes") Alexant, P.E., Jaffrey DPW Director Jonathan Sistare, Jaffrey Town manager Franz Vail, P.E., DES WWEB John Bush, P.E., Administrator, DES WWEB Harry Stewart, P.E., Director DES WD Gretchen Rule, DES Legal Unit Joy Hilton, EPA Region I

Jennifer Patterson, NHDOJ